American Farmer,

AND SPIRIT OF THE AGRICULTURAL JOURNALS OF THE DAY.

"O Fortunatos nimium sua si bona norint
"Agricolas." *Virg.*

Vol. VI.—*New Series.* **BALTIMORE, MD. SEPT. 11. 1844.** **No. 17.**

TERMS—The "AMERICAN FARMER" is published every Wednesday at $2.50 per ann. in advance, or $3 if not paid within 6 months. 5 copies for one year for $10. ADVERTISEMENTS not exceeding 16 lines inserted 3 times for 1$, and 25cts. for each additional insertion—larger ones in proportion. ☞Communications and letters to be directed to SAMUEL SANDS, publisher, corner of Baltimore & North st

[*From the Transactions of the N. Y. State Agricul. Society.*]

INSECTS

INJURIOUS TO THE FARMER & GARDENER

A SERIES OF ESSAYS, BY WILLIS GAYLORD.

(*Continued.*)

There are several species of a minute beetle—deriving their name of *Haltica* from their leaping properties—which are very destructive to cultivated plants; of which the cucumber flea-beetle, *Haltica pubescens*, and turnip or cabbage flea-beetle, *Haltica striolata*, are the most common and voracious. The first attacks the cucumber and melon plants as soon as they appear above the surface, and by devouring the seed leaves, effectually destroy their growth. This insect is black, and is justly regarded as the pest of the cucumber grower. Sprinkling with soot, lime, ashes, &c. proves but a doubtful preventive at best. Whatever is used, should be dusted on when there is dew on the plants; but at this early stage such plants are so tender that too heavy doses of these substances are apt to be more fatal than the beetle. Watering the plants with soap-suds operates favorably, as will anything that gives additional vigor to the plants. Wetting the leaves with a decoction of intensely bitter plants, such as tanzy or wormwood, renders them distasteful to the beetles for a time, and we have found much benefit from simply scattering the green herbs over the plants on their first appearing. Where a farmer has but a few hills of cucumbers or melons, he may protect them till the rough leaf appears, by spreading a thin covering of the tow of flax over them; this is effectual until it is wet; and it may here be added that such a covering is one of the best guards, also, against the striped beetle. It is the turnip beetle described above, that infests the cultivated cresses, mustard, radishes, &c. of the garden, and the treatment in the one case will be applicable in all. Since the extensive introduction of the turnip into field culture in Europe, the best means of freeing them from the attacks of this beetle have occupied much attention, but nothing has yet been discovered which can be confidently relied upon. Forcing them through their growth of seed-leaf into the rough-leaf, is found to be the surest way, and a variety of active manures, of which bone dust and guano are the principal ones, are used for this purpose. It has lately been asserted that soaking the seeds of such plants in whale oil before sowing, will protect the plant perfectly; and in the only experiment we have tried with it, owing to that or some other cause, the plants wholly escaped. A solution of whale-oil soap would doubtless be very useful, as it appears to be extremely offensive to most insects.

The *Aphides* or plant lice, as they are usually called, present a very extraordinary as well as a numerous race of depredators. In the garden, their most destructive effects are experienced on turnips, mustard, cabbages, and other plants allied to these. The plant louse presents many characters worthy of notice. Destitute of mouth, it lives by sucking the juices of plants through a short tube; so exceedingly prolific that it has been calculated that a single female in five generations may be the progenitor of as many millions; a single fecundation rendering the females prolific to the seventh or eighth generation; fond of society, and usually residing in dense masses or colonies; and what seems most curious of all, each aphis is a living manufactory, in which the crude juice of the plant on which it feeds, is converted into a clear sweet substance resembling honey, which it ejects at pleasure from two tubes near its hinder extremity, and on which multitudes of flies, wasps, ants, &c., feed at their leisure. The plant lice usually fix themselves on the under side of the leaves of the plants they choose, and the leaf soon shows the influence they exert, in its curled and discolored appearance. There are some kinds of plant lice that attack the stems of plants beneath the surface, and destroy them before their presence is suspected. On radish and mustard, the colonies generally fix on the rapidly-growing and tender stalks rather than the leaves, while on the cabbage and turnip it is the latter that are attacked. The cabbage aphis is easily distinguished from the other kinds by its singular mealy appearance and its greasy feel. Tobacco water, alkaline solutions, such as lye or soap-suds, and even hot water, have been reported as remedies for the aphis. On any plant over which a tight box or barrel can be turned, plant lice may be readily killed by fumigations with sulphur or tobacco. We have killed them on the branches or stems of plants or trees, by holding them in soap suds; if too strong, however, it burns tender shoots. But much the best remedy we have ever tried, where garden vegetables are concerned, is to keep a sharp look-out for their earliest appearance; and when a colony is discovered, to pluck the leaf at once and crush the whole under the foot. The appearance of the plant is a sufficient guide to detect the aphis, and as they multiply with astonishing rapidity, the destruction of a single colony in the outset, frequently saves much labor or perhaps the entire destruction of the plants. Fortunately there are several insects harmless to vegetation that prey on the aphis and greatly reduce their numbers; and there are several of the smaller birds, the yellow bird in particular, that render the gardener good service by feeding upon them.

The wireworm, the larvæ of the *Elater lineatus*, is frequently very troublesome in gardens, where it feeds on the roots of various plants, and frequently destroys them wholly. The true wireworm is well figured and described in Kollar's treatise, and we have had abundant opportunity of identifying both the perfect insect and the larvæ. It is in this country more destructive to the Indian corn than perhaps any other vegetable, though it occasionally makes great inroads on potatoes. We have sometimes seen six or eight sticking out from different sides of a potato, or from that part of the stem of corn below the surface. Old meadows, if turned over and planted to corn, are more liable to suffer than other soils, as the perfect insect finds a refuge and a place to deposite its eggs among the grass. In 1836 we turned over a meadow which had been in grass many years—rolled, harrowed, and planted it to corn. The seed had scarcely been deposited ere it was attacked by the wireworm, and in many of the hills some three or four of the worms might be seen feeding on a single kernel. Some came up, but the appearance soon convinced us we had nothing to hope from our corn; and the field was replanted between the corn rows with potatoes. These fared but a little better for a time than the corn, as in the parts of the field where the worm was most numerous, the potato seed, in about a week, more resembled pin-balls, from the worms sticking in them on all sides, than potatoes. Still, from the inherent vigor of the roots and their rapid growth, the greater part escaped total destruction, and about 160 bushels per acre were gathered in autumn. There are many worms that go by the general name of wireworm among farmers, but the true one, or the larvæ of the *Elater lineatus*, is readily distinguished by its deep yellow-brown color, and by having on the last segment of its body two minute black spots. It makes great ravages among the roots of plants, but is generally more destructive in the field than the garden, owing to the soil of the latter being more frequently disturbed than that of the former. For the same reason, this insect is less troublesome on lands subjected to a regular rotation of crops than on those where the plow is less used and the fields lie long in meadow or pasture. Deep plowing late in autumn, or a summer fallowing, is the most effectual remedy for the wireworm. When crops are attacked, such as corn or grain, there is no known remedy that can be relied upon. Sowing with salt has been recommended, but it must be recollected that most applications to the soil, if sufficiently active to destroy worms, will also be fatal to vegetation.

The "*Pea Bugg*," as the insect that infests the pea is commonly called, is the *Bruchus pisi* of the naturalist, and is well known in this country from the ravages it commits on the pea, both in the field and the garden. The perfect insect is found in peas that have been kept over the winter. On examining seed peas, some will be found with small holes in them, and in such the beetle is found or has just escaped. As soon as the pods are formed on the growing plant, the insect pierces the young pod, deposites its egg in the seed, and in a few days a little white grub becomes visible on the external surface of the pea. It soon burrows in the seed, on which it lives and thrives, and obtains its full size about the time the pea arrives at maturity. In its hole it changes to a pupa, remains during the winter in this state and emerges in the spring, ready to commence the work of destruction as soon as the sown pulse is sufficiently advanced for its purpose. Sometimes they become so numerous as almost to destry the entire crop, and are generally present more or less. Well has Dr. Harris remarked that "few persons, while indulging in the luxuries of early green peas, are aware how many insects they unconsciously swallow." There are several ways in which the ravages of this insect may in a great measure be prevented, all of which are based on the plan of having the seed free from them when sown. As the infected seeds are lighter than the sound ones, throwing the seed into water before sowing will separate many of them. Putting the seed in hot water for about two minutes will kill the bug and not injure the pea. Late sowing will frequently save the crop, as the period of the beetles' attack is quite limited. Sown after the 10th or 15th of June, they are rarely disturbed to any extent. But after trying all these methods, the one we prefer is to use peas for seed that are two years old, or have been kept over one season. Deane recommends keeping them over in *close vessels*, but this is of no use so far as the crop to be grown from them is concerned. As the insect comes to maturity and emerges the first spring, after they have escaped the pea is clear, and no insect will ever proceed from them. If those who cultivate the pea, either in the field or the garden, would pay a little attention to freeing their seed from the insect for a few seasons or even for a single one, it would soon cease to produce the extensive injury it is now known to inflict. There is one kind that attacks the bean, but they are very rare in this country.

The cabbage, turnip, &c., but more particularly the cabbage, are occasionally infested with caterpillars, which produce great injury, in some instances nearly destroying, when unchecked, the whole crop. One of these depredators is a caterpillar, "bluish green, thinly haired and "sprinkled with black dots; having a yellow stripe on "the back and the same on the sides." (*Kollar.*) Another is a caterpillar "of a dull green, with fine white "minute hairs, a yellow stripe on the back, and yellow

"spots on the sides, on a pale ground." (*Kollar.*) An- "other caterpillar "is green, more or less covered with "grey or black. There is a dark stripe on the bark, on "which there is a pale indistinct line. Above, it is some- "times furnished with dark or pale spots placed length- "wise. At the sides is a dirty yellow stripe, which be- "comes reddish above." (*Kollar.*) There are several others that may be found on the cabbage and turnip at times, but these are the most common and destructive. Some of these caterpillars are the larvæ of butterflies, and the others of moths, which deposite their eggs on the vegetables, and these hatching give rise to the multitudes of worms which at times so suddenly show themselves. With all insects of this kind the better way is to gather the leaves on which the colonies appear, and destroy the whole at once by burning or crushing. For some time all the worms remain together, and if the leaf is removed on which they are hatched, before they find it necessary to scatter in search of food, their destruction is an easy matter. If a broad cabbage leaf is selected and placed over the head of a plant infested by caterpillars, on removing it in the morning a large part of them will usually be found collected on it, and may be then killed. If they have left the plant, they may be picked off from the leaves on which they are feeding elsewhere, and killed singly. As there are usually two or more crops of these insects in a year, destroying the first that appear frequently prevents a prodigious increase.

As there is scarcely a cultivated plant in our vegetable gardens on which one or more insects do not prey, a complete notice of them all, even were the writer competent to such an undertaking, would far exceed the limits of a mere essay. Such only have been selected as produce the most mischief, and the understanding of the habits of which are of the most consequence to the farmer.

SECTION II. *Insects injurious to Field Crops.*

Destructive as insects unquestionably are in the garden, the damage they there occasion is but a tithe of that they influence in the field, where they frequently destroy the hopes of the husbandman, blight his prospects of harvest, and not only prevent all profit but cause a loss of all the hard toil he has expended in the culture of his crops. It is to be much regretted that so little attention has been paid by men of science in this country to *our* depredating insects. That they frequently differ in appearance from those known by the same name in Europe is certain, in many cases; and it is fair to infer that their habits and modes of destruction may be also different from theirs. The man who shall furnish the farmers of the United States with a full account of the different insects that prey on our wheat crop, its roots, stems, leaves and seeds, will render the agriculture of this country a service entitling him to more gratitude and securing him a more certain claim to a long and honorable remembrance, than could be acquired by the most brilliant political, diplomatic or literary labors. The thoroughly educated entomologist can alone do this, and it is a work requiring years for its successful execution. The farmer finds his wheat crop cut off year after year, and he knows the injury is done by an insect; but his knowledge of insects, their habits and transformations, is too limited to enable him to observe and describe correctly, and it is not to be expected it should be otherwise. The labor must be performed by the professed entomologist, aided in his observations by the farmer, or it will never be done at all; and when it is remembered how essential such a thorough examination of the insect that prey on our field crops, those of grain in particular, is to the agricultural prosperity of our country, it is to be hoped the investigation will not be much longer delayed. Until such full accounts and descriptions are given, the most that can be done is to collect such facts as shall best enable the farmer to know his enemies and avoid or destroy them.

In a notice of the insects injurious to field crops, those that attack wheat are, perhaps, deserving the first place; not only from the value of the grain itself, but from the extent of the damage they sometimes occasion. Of the insects that prey upon wheat, the one that effects the most widespread injury, is the Hessian fly, *Cecidomyia destructor* of Say. This insect is a fly about one-tenth of an inch in length, with wings expanding one-quarter of an inch; in this respect, however, a trifle of difference may be observed. The head and thorax are black, the hind part of the body tawny, and the wings blackish; round at the ends and fringed with short hairs. Perhaps there are few insects whose history, habits, and transformations have been more controverted than this. Some of the best descriptions of this insect may be found in the American Monthly Magazine by Dr. Akerly, in Say's Entomology, in Silliman's Journal, Vol. 41, and in the "Cultivator" for May, 1841. In Dr. Harris's work on Insects, this insect is very satisfactorily treated, and its history given with much correctness. There is no account of the Hessian fly in this country previous to the Revolution, and as it first appeared in those districts where the Hessian or German troops had their residence, it was supposed to have been brought by them, and hence its name. European entomologists for a long time contended the name was incorrect, that no such insect was known on that continet. and that it was strictly American; but the researches of Kollar, and the evidence furnished by Mr. Herrick for the Journal of Science, of its existence in France and Minorca, would seem to render it probable that the first impressions of its origin were correct, and that these foreign mercenaries introduced it in the straw of their baggage, a thing very possible if its existence abroad be admitted. We have paid much attention to the habits of this insect, and for the most concise, as well as accurate description we have ever yet seen, must refer to the paper furnished the "Cultivator" in May, 1841, Vol. 8th, by Mr. E. Tilghman of Maryland. The substance of the same paper may be seen in Dr. Harris's work on Insects, page 425. Our observations, as well as those referred to, establish the following positions:

That the Hessian fly usually, if not invariably, deposits her eggs on the blade or leaf of the wheat. Some have asserted that the fly deposits its eggs in the ear of wheat, but this would not seem to be the usual time of its appearance, and the writer has never detected the fly on the ear:

That the worm when hatched makes its way down the blade, to its junction with the stem. The worm itself is slightly reddish, and may be seen in its progress. The position of the worm is with the head always towards the root of the plant:

That they do not eat the plant, but suck out its juices; and as they grow hard and increase in size, they become imbedded in the green stem of the plant, somewhat resembling in this flattened state, a flax seed in size and color:

That one larvæ will produce little effect on the stalk, but when three or four, or even a greater number, are about one stem, they destroy it. The first evidence of the fly in wheat is an unhealthy yellow color about the time of earing, and this is followed in a greater or less degree by falling of the stem as they become more and more weakened:

That there are two generations of the perfect insect in a year; one of which deposits its eggs in the autumn wheat, where the larvæ is matured and passes into the pupa state for the winter; of this generation, the perfect insect appears in May or June, and deposits its eggs on wheat sown in the spring, or, if the insect makes its appearance sufficiently early, on the latest winter wheat. The several changes are passed, and the perfect insect emerges usually in October, to again attack the September sown grain.

Miss M. H. Morris, of Germantown, Pa., in a late communication to the American Philosophical Society, states that she has been for several years investigating the habits of this insect, and has arrived at the conclusion that the egg is deposited in the seed. Sown with the seed, the larvæ is produced within it, and ascends within the young plant to its usual position between the root and the third joint. The substance of Miss Morris's researches were communicated to the Philadelphia Agricultural Society, by Dr. Coates, and, with the remarks of a committee, may be found in the Farmers' Cabinet, Vol. 5. page 201. From this statement of Miss Morris, it would seem that all that is necessary to free the wheat-crop from the fly, is to obtain seed from districts where it has not yet appeared, or where the crop from which the seed is taken was free from the insect. Unfortunately for the theory, such is not the result in practice, as may be seen from a paper in the Cultivator for August, 1841, furnished en by Mr. Bergen of Long-island.

In avoiding the ravages of the Hessian fly, much is depending on the variety of wheat sown. Those kinds that have the thickest hardest stems suffer the least, as such best resist the pressure of the insect. Hence the Mediterranean wheat is valuable, rarely being injured to any considerable extent. Any thing that has a tendency to give a quick and vigorous growth to the wheat plant, acts favorably, by better enabling it to resist the exhausting action of the larvæ. Steeping the grain in brine, and drying it in lime, guano, or other substances that act by giving a rapid growth, have been tried with success. It is probable that sowing the fields with powdered quicklime, at the time the insect is depositing its eggs would do good, as experience shows that wood ashes sown at these times certainly do. As the insect, in some of its stages, must be in the stubble after the wheat is gathered, it would seem reasonable that burning the stubble, where practicable, would destroy thousands, and experience shows that such is the case; and this burning, particularly if followed by a ploughing, is doubtless the most effectual preventive yet discovered. Were not the practice likely to be injurious to the grain, feeding close late in the fall, would be very advantageous, but this course is one the farmer would not be willing to adopt unless the danger from the fly was most imminent. But the most effectual check to the multiplication of the Hessian fly is found in several parasitical insects that prey upon them in all their stages of egg, larvæ and pupa. According to Mr. Herrick, whose valuable paper may be found in Silliman's Journal of Science, Vol. 41, page 156, more than nine-tenths of every generation are destroyed in this way. (*To be Continued.*)

VEGETABLE PHYSIOLOGY.—The study of vegetable physiology, like that of chemistry, presents a field for research and investigation in which the proudest faculties find ample scope. If we take the simplest plant, and examine it with reference to its anatomical structure, aided by the requisite instruments of enlightened research, we shall find that in all its parts, nature has evinced the same wonderful wisdom, and the same astonishing sagacity as regards the grand primary laws of vegetation—adaptation and combination—which characterize her labors in her more finished works. The incomprehensible variety in which the primordial principles of vegetable life are made to develope—ranging through the forms, entire series of qualities, hues, odors and flavors, cannot fail of being, to the enlightened, a source of the deepest and most gratifying delight. What, for instance, can be more dissimilar as regards their structure and apparent character, than the tough, elastic and well known substance called *chaoutoc*, and the granular, rapid and nutritive product of the cane. Yet in the laboratory of the analytical chemist, these ostensible boundaries of demarkation vanish, almost instantaneously, before the wand of art, while the article of *linen*, the materials for which have been grown upon a foreign shore, and carried through the complicated preparatory process of rotting, bleaching, hatchelling, spinning, &c., &c., &c., is resolvable, by the potency of the same magic wand, into a substance precisely identical with both.

By the side of the lordly pine, fit for

"The mast of some tall admiral,"

grows the deadly hen-bane, and the fatal night shade; and yet these plants, so differently characterized by outward aspect and internal qualities, have all been nourished by similar alimentary particles, and perfected from the same common soil.

If a scion from the Siberian crab, be inserted in a stock of another variety, the fruit of each will retain its own distinctive characteristics and family configuration, unimpaired. The wonderful power in nature, by which this singular immutability is preserved, will probably ever remain as it now is concealed from the eye of the physiologist. It is a power throned amid the arcana of her subtlest rudiments, and which we are permitted to study only in its results.

"Far from all vision this profoundly lurks,
Through the whole system's utmost depths diffus'd."

There are those, however, who manifest no enjoyment while contemplating these wonderful phenomena, and who appear to consider "NATURE" merely in the light of a very efficient laborer whose operations are under the eye and care of a great "architect" whose "supreme benevolence" designs and regulates them as will most conduce to attainment of one great end, viz:—"the present happiness and welfare of man." Like the savage, they are gratified, perhaps "*grateful*," when they behold the golden grain peering from its silver cerements, or the tempting fruit bending the "harvest bough," or the yellow corn smiling in the affluent sheaf; with this, their selfishness is satisfied. They never inquire "how it came there."—*Maine Cult.*

Saliva in Horses and its Cure.

Friend Buckminister.—(For so I choose to call all *Agricultural Editors.*) There is a common disorder among horses, if so it may be called, by some termed the *salina;* and by others called the *slavers*, from the continual slavering of the beast troubled with it. Its effects are too generally known to need description. As to the *cause*, there are various opinions among farmers and hostlers upon the point. Some attribute it to the animals eating the common *Canadian thistle;* some to *lobelia;* and by others it is averred to be caused by *trefoil*, otherwise, the common clover; and others again, are of opinion it is caused by a certain *secretion* found more or less upon all grasses in the months of June and July. We never had any settled opinion of our own upon the subject until quite recently.

Sometime in the month of April last, I had occasion to buy a few hundreds of hay for my horse. The hay was composed entirely of clover and sorrel, nearly equally divided. I discovered on the horse's feeding upon it a day or two he began to slaver excessively; I had before fed him on clear clover and other English hay, without observing any such effect. From this fact it occurred to my mind it might be the sorrel that caused it, and from subsequent experiment and observation, indeed, I am satisfied of it in my own mind. From the known acetic quality of the plant, *sorrel*, we infer it may cause an excessive fermentation in the animals stomach, which discharges itself in the manner noticed; being of the nature of what is termed *heart-burn or sour stomach* in our own species.

From all these facts and observations at the time mentioned, and since, I inferred that, perhaps ashes or alkali would operate as an antidote to cure it; accordingly I gave my horse a sprinkling of ashes in his provender, and found it had the desired effect—we have done so repeatedly to the same good effect. The alkali neutralizes the excessive acidity of the stomach and restores it to its proper tone.

These, Mr. Editor, are our simple views upon the subject; all of which is submitted to you and the public consideration. Respectfully yours,

B. F. Wilbur.

Buttlers' Vale, August, 1844.

☞ Horses are very often troubled with slavers in the month of August, and sometimes in July, but seldom so early as June. It is not yet known with certainty what causes this drooling of the horse. It may be that various herbs have this effect on him and common sorrel may be one of them, though we should rather hear the question argued a little more before giving so much importance to sorrel.

Neither horses nor horned cattle will eat sorrel when they can have any thing else; and when it is cut with clover it is so destitute of leaf that it would not seem capable of doing much mischief if only a straggling stalk should occasionally be mixed with other vegetables; since it is never considered a very powerful product for good or evil.

But, secondly, if sorrel is the plant that causes this drooling why does it not operate earlier in the season? Sorrel comes forward earlier than any of the grasses, and unless it can be shown that it is more powerful when divested of leaves than at other season the presumption should be that sorrel is not guilty.

There is an herb called *lobelia* that is more poisonous than tobacco. This herb comes out late, after the first cut of clover, and you will find none of it among clover hay that was cut in due season. You will find also that horses which are fed on *this* clover are not troubled with the slavers; and yet when they are fed on rowen that is cut a month later *from the same land*, they are often affected with this complaint. This has been noticed by many farmers.

There is always more sorrel in the first cut of clover than in the second, consequently we should suppose the early hay would prove most deletereous provided sorrel is the cause. It seems to be pretty clear that if the slavers are caused by an herb, it must be a very late herb of some kind.

Some farmers have turned their horses out of pastures that abounded in lobelia and put them where none could be seen. This has had the effect to check the slavers very soon. This is the amount of the evidence against the herb *Lobelia*. It is not conclusive, but it is powerfully presumptive.

In regard to remedies our correspondent may have hit upon the best that have been used. The alkalies which he proposes may be effectual to neutralize the acidity of the stomach whether produced by sorrel or by some other plant. We are not very positive on this subject and should like more facts and more opinions of nice observers of the slavers in horses.—*Ed. Mass. Ploughman.*

Experiments made to test the value of Guano Manure.

"I first witnessed its effects, as a powerful fertilizer, in the growth of early potatoes, applying a little round the shoot, soon after its first appearance above ground; a greater luxuriance of growth was perceptible in the stalk a few days after, and having added a little more, previous to earthening them up in the usual way, I was afterwards astonished to find potatoes, quite fit for the table, at the stalks manured with guano, while those not so treated were scarcely formed, although of the same description of seed, and planted at the same time. Again, I applied it to potatoes fit to dig, the tops of which had lost their green appearance, and where of the hue indicating maturity of the root, and a few days only elapsed before they were changed to the green and growing state they were in some weeks previous; and it was eventually found, on taking up the crop, that not only were the potatoes larger, but that a second growth of tubers of small size, and very numerous, had been the consequence of the application of the guano. These potatoes were manured, at the time of planting, with farm-yard dung.

"My next trial with guano was with turnips. I tried it sown broad-cast on the land, afterward drilled up light before the seed was sown, alongside of deep drills with farm-yard manure applied at the rate of about 20 tons per acre, on a fine loamy soil; the braid of those with guano was not only stronger and more regular, but the tops of the turnips have continued in their fresh and green state, after a great part of the others are fallen to decay, and the crop was much more even and better than the other part of the field.—In speaking of this crop, perhaps it were well to mention that I had sown a few drills without any manure, at one side of those manured with guano, merely to see the difference. The seed certainly did braid, but that was all, for they scarcely made any progress whatever, and were considered as not worth the labor of hoeing; but I desired the work-girls to pulverize a quantity of guano, and put a little round each sickly plant; and when I visited the field some days after, I was literally astonished to see the change that had taken place; the leaves of the turnips had grown and spread so rapidly as nearly to meet in the drill, and have turned out, much to the surprise of every one acquainted with the facts of the case, a very fine crop.

"The only other instance I have tried guano in the fields is on wheat, and in this case it was mixed with mould and ploughed in previous to sowing; the wheat came up well, and has a beautiful color, with that peculiar curl which denotes a promising crop.

"I planted several apple-trees, and put about a pint of guano to the roots of each at the time. They are growing remarkably well, and although we did not allow them to bear last season, excepting two trees only, in consequence of being so young, it is a singular fact, that they have *all* blossomed twice this year; and the two we allow to bear, while the ripe apples were upon them, were in blossom at the same time. The raspberry bushes manured with it also came in blossom after bearing fruit.

"From the experience I have had with guano, I consider it peculiarly adapted to the potatoe crop (to which it should be applied at two different times) as well as to the turnip and cabbage and green crops in general. I think it very applicable to mountainous districts, where cartage is impracticable, for a man could carry as much on his back as would manure his half acre of ground.

"On the 28th of April, 1842, 7 acres, 3 roods, 23 perches, statute measure, of pasture land, in poor condition, of strong clayey nature, were covered broad cast, at the rate of 3 cwt. of guano, and 1½ bushel powdered charcoal, per acre. After the first shower of rain there was a striking improvement in the color of the vegetation; and the cattle evidently, after a few days, preferred that part to any other in the pasture.

At the same time 5¼ acres, statute measure, of meadow land, were covered, broad cast, at the rate of 2½ cwt. of guano and 1¼ bushel of charcoal dust per acre. The improvement was so immediate, and the promise of beneficial effects so great, that I determined to carry out the experiments still farther. Accordingly, on the 20th of May, 15 statute acres were covered in like manner, and with the same proportions of guano and charcoal-dust. The nature of the soil in all this meadow is very stiff upland, but well drained. It had never to my knowledge been satisfactorily productive. The whole of this meadow was cut in June. The result was abundant, and exceedingly thick at the bottom. On 6 statute acres of the same meadow, (but where the quality of the soil is much better, and always has produced a much heavier crop,) 30 loads of farm-yard manure per acre had been laid on in the spring. The produce this year was about one-third in favor of those parts to which the guano had been applied.

"For all purposes for which bones or farm-yard manure are applied, guano must be successful. Many experiments have proved this. General Beatson found

35 bushels of guano per acre, to yield	639	bushels potatoes.
35 loads of horse dung	626	"
35 loads of hog's dung	534	"
Soil simple	446	"

"200 lbs. of guano per acre, applied by Mr. Smith of Gunton Park, gave fifty bushels and half a peck of wheat per acre; while 15 bushels of bone dust gave only 46 bushels per acre.—Mr. Lowe, of Shoreham, Kent, applied 2 cwt. per acre for turnips with success. Mr. Skirving, of Liverpool, used it upon Swedish turnips and Italian rye grass: 2 or 3 cwt. per acre he found equal to 20 cubic yards of farm-yard manure.—Our own experiments with it have been on Swedish and white turnips. For Swedish turnips I applied at the rate of 2 cwt. per acre, with an equal quantity of earth. For white turnips, 2 cwt. per acre was used, mixed with 6 bushels of earth; and 1 cwt. per acre, mixed with 12 bushels of bones, upon another portion. The manure was drilled with the seed, and the consequence was, that a large portion of the seed was destroyed. In places where the seed had not mixed with the guano, the turnips came up well, and had a more luxuriant appearance than those manured with other substances."—*English pa.*

Clean Culture.

It is a fact that ground which is kept from vegetation of any kind, will not dry up so much as that on which a crop is grown. There are many who doubt this, but if they would make a proper examination, their doubts will be removed. Make an experiment:—take a piece of ground in the garden and hoe it over every day, or often enough to keep all kinds of vegetation from starting. Sow another piece adjoining with grass, or some kind of grain. After a drought of two or three weeks, examine both pieces by digging into them with a spade or shovel. The earth of the grass or grain plat, will be found dry like ashes, to the depth of a foot or more. The other will be dried in only two or three inches—below that it will be found moist. Examine the ground in an orchard in a dry time, it will be found dry to a great depth. If there is a tree in your corn-field, see if the ground is not much dryer near it than on similar ground away from the reach of its roots. The fact is, the roots of vegetation bring up the moisture from a greater depth below the surface, than it could be done by simple evaporation. This may be known by noticing how much more moisture is required to support a crop of corn when the stalks are nearly full grown, than in its earliest stages.

Now, from all this we deduce an argument in favor of *clean culture*—that is, a culture which permits no useless vegetation to grow among cultivated crops; the advantage of which would be to give the crop the whole benefit of the moisture and other nutriment of the soil, instead of giving a portion to the worthless weeds.

In a dry time, we frequently hear farmers say, "it will not do to work my corn or potatoes; they need all the grass and weeds to keep the ground from drying up." Now this, as we have shown, is all a mistake—the grass and weeds make the ground dry faster and deeper. But it has been alleged that corn has been injured by plowing or working it when the weather was very dry. We admit that this effect may have followed under particular circumstances. That is to say, if corn gets too large before it is worked, injury may be done. The reason is, that the roots have become extended, and the plow cuts off so large a portion of them, that the remainder cannot supply the stalk, and it soon withers. This is the way the "*fired*" corn, sometimes spoken of at the south and west, is generally produced.—Alb. Cult.

THE AMERICAN FARMER.

PUBLISHED BY SAMUEL SANDS.

THE AMERICAN FARMER.

The Proprietor of the "American Farmer" establishment, expecting shortly to be engaged in the publication of a daily journal in the city of Baltimore, to which he desires to devote as much of his time as possible, would dispose of this establishment on liberal terms, if an immediate application be made. The character of the "Farmer" is too well known to require comment—it is the oldest Agricultural journal published in this country, being now in its 26th year. The central situation of Baltimore renders it a peculiarly advantageous location for a publication of the kind, and in the hands of a person who had a taste for agricultural pursuits, and a necessary talent for conducting the business department thereof, it might be made to be extensively useful and profitable.

The services of the gentleman at present and for several years past engaged in the editorial department, could be secured, if agreeable to the parties concerned.

☞The patrons of the "Farmer" are assued, that in case a disposition is not made of it, no interrruption will be made in its regular publication. Address, if by letter, post paid, SAML. SANDS, Baltimore, Md.

☞ *Our exchanges will oblige us by noticing the above.*

SALE OF DURHAM CATTLE.—We would draw attention to the Sale of Durhams advertised in this week's paper.—It will be seen that the day of the Sale, as originally published, has been changed to the 26th of this month. As the stock of Mr. Gowen is so universally known, as being about the very best in the United States, no comment of ours is necessary to secure the attention of those deserous of obtaining superior animals.

☞Catalogues giving the pedigrees of the animals to be sold, can be had at this office, or will be forwarded to any one wanting a copy.

GUANO.—It will be seen by reference to the advertisement o Mr. George, in our advertising columns, that he has a large supply of Guano for sale, which we can confidently recommend to our readers, as being pure. Those wishing less quantities than a ton can be supplied at $3.50 per cwt. by applying to the publisher of this paper.

ANNUAL FAIR AT GOVANSTOWN.—The Fair of the Baltimore County Agricultural Association, it will be seen is announced for the 23d and 24th days of October. We have the pleasure of stating that the Managers of the Society have been very successful in increasing their list of members during the past year, and that the Fair to be held in October will be gotten up with much spirit. We invite our friends at a distance to be with us on that occasion—we will bid them a hearty welcome.

SHEEP HUSBANDRY—NECESSITY FOR DIVERSITY OF LABOR—WOOL GROWING—EXCESSIVE PRODUCT OF WHEAT.

We learn from the Albany Cultivator, that Mr. L. A. Morrell is preparing a work on Sheep Husbandry, and we receive this information with feelings of unmingled pleasure, as such a work is greatly needed, and we know of no gentleman better able than he, to prepare just such an one as will suit the wants of the agricultural public. Besides being a distinguished agricultural writer, a gentleman of education and acute observation, he is, himself, a practical sheep culturist, of long experience. His work, therefore, will not be one of mere *theory*, but will reflect the lights of that *experience*.

We say that a work on sheep husbandry is *needed*, and surely no one acquainted with the defects of most of those in the book stores, will doubt the fact; for, as they are either European works, or compilations chiefly from them, in most instances they are but ill adapted to the instruction of the *American* sheep breeder—our climate, as well as system of cultivation, being so different to those of Europe, as to render the adaptation of books from that quarter of questionable character. But there is another consideration, which operates on our mind. It is known and felt by wheat growers in the middle States, that, since the extension of wheat culture in the far of West, connected as it is with the facilities of Lake, Canal, and other mediums of transportation, that in the absence of foreign markets for that product—and these cannot be expected while the European powers remain at peace—that the product of wheat, has been carried very far beyond the demand, and hence the depreciation in its price; for no truth can be more susceptible of demonstration, than that the *value* of any commodity, is regulated and governed by the quantity which may be in the market, the relations of plenty and scarcity—the laws of *demand* and *supply*—being as fixed in their operation upon price, as were the laws of the Medes and Persians, unchangeable under the peculiar policy of those people. If the supply be in excess, as the demand cannot be pushed by artificial means beyond the necessities of nature—beyond the wants of the consumer—it follows as a necessary consequence, that prices must fall, as they are, by immutable laws, made to conform to the demand, which may prevail for the articles, when offered for sale.

If then farmers should listen to the warning voice of experience, if they heed the whisperings of reason, and follow the teachings of all past history, they will cast about their minds and search for commodities, by whose culture they can diversify the productions of their lands, and more profitably occupy their labor. Standing as we do, morally, as guardians of their interests, we have felt it to be our duty to call attention to the importance of this subject—and upon more occasions than one, we have presented to their consideration, the propriety of moderately increasing their flocks of sheep, with an eye to deriving emolument from wool growing. This branch of husbandry might be increased a hundred per cent., without overstocking the market or injuriously affecting price, as the present and prospective *demand* would justify that amount of increased supply. In view of these facts, and their operation upon the interests of husbandry, we hail the contemplated work of Mr. *Morrill*, on sheep culture, with feelings of peculiar satisfaction, and while we thus endeavor to attract the attention of farmers to its forthcoming publication, we seize the occasion, of again pressing upon their notice, the necessity of appropriating a portion of the lands, which they have hitherto devoted to the growth of wheat, to that of *wool*. By so doing they will not only exert a healthful effect in bringing down the excessive product of the former article, to something like an equality to the demand, but in so doing they will effectuate an augmentation in its price, bearing a just relation to the expense and trouble of growing and preparing it for market, as well as secure to themselves a reasonable and fair profit for their outlay and toil in cultivation.

MANAGEMENT OF SEA WEED.—A writer in the Mark Lane Express (England), gives the following as his practice in the use of sea-weed. He hauls it out when freshly gathered upon his Wheat stubble, spreads it, and after letting it remain a day or two for the saline matter to precipitate, ploughs it in, and never fails to get a good crop of barley or oats.

At other times he hauls it to a head land, and mixes it with mould, in the proportion of one load of sea-weed to six of mould, turning it at least twice in the course of the season, when, as he observes, it proves a *first* rate manure for *all* agricultural purposes.

These plans we do not doubt to be good, but we can see no propriety in letting the weed lay exposed to the sun after it is once spread, as a very few days, thus exposed, would, from the readiness with which the process of decomposition goes on, cause very valuable portions to escape in the form of exhalations. If we were accessible to sea-weeds, we would plough it in as spread, first lightly covering its surface with plaster, to arrest the flying off of gases—and so would we mix plaster with the mould and sea-weed, and instead of turning it over twice in the season, we would let it remain until we desired to use it, when we would cover it as speedily after getting it in place as possble.

That sea weed is a valuable manure, if well managed, we have no doubt, but from the slovenly and neglectful manner of its application, it has got into rather bad odour with those who because it does not last *forever*, think it of no use whatsoever, whereas, its want of permanency, is to be ascribed to their own bad management. From its very texture, it is to be presumed that it will lose much of its fertilizing virtues, unless it be mixed with some absorbent calculated to arrest, asseimilate with, and retain its ammoniacal salts—and we will here mention, that either ground Plaster or Charcoal will so operate.

METHOD OF DESTROYING THE BUG IN THE GREEN PEA.—A writer in the Southern Agriculturist gives the following method of destroying the bug in the Green Pea. He gathers them when thoroughly ripe, spreads them out for a day or two in the sun, then puts them into black bottles, corks the bottles up, and hangs them up for a few days in the sun, and seldom sees a hole in any of his peas.

The great NEW YORK STATE AGRICULTURAL FAIR, takes place at Poughkeepsie, on the 17th, 18th and 19th instant.

SILK COCOONS.—Mr. I. R. Barbour, of Oxford, Mass., will pay cash for good cocoons, assorted and well flossed. The price is from 2 to $4, according to the quality.

RECIPES.

For Bowel Complaint, Dysentery, &c.—Take common ground cinnamon, or cassia, any quantity, say a teaspoonful to begin with; mix it in water sweetened with molasses, and drink as often as wanted. This will immediately relieve and stop the above complaints; it is attended with no risk, and will not leave the bad results which so often attend opiates, &c. This will do when taken in time; but when the complaint is seated, more effectual measures should be resorted to, and only under the pyhsician's hand.

To Preserve Tomatoes, Blueberries, Peaches, &c.—Put them into clean bottles and cork well; then put them into a kettle filled with cold water, and gradually raise the temperature to the boiling point. Then take out and dip the mouth into melted sealing wax, and tie over with bladder. Articles treated in this way will keep good for years, and as fresh as ever.

Tomato Tart.—Roll out your dough very thin and place it on the plate in which you intend baking your tart, and then slice your tomatoes very thin, spread them over the dough very thinly, take about two table spoonsful of brown sugar, and one of ground cinnamon bark, spread the two over the tomato, bake it well, and you have a delightful tart.

PRESERVING TOMATOES.—Take six pounds of sugar to a peck of tomatoes. Scald and remove the skin in the usual way. Cook them over a slow fire, with the sugar, without water, their own juice being sufficient: let them remain over the fire till the sugar has penatrated and they are clarified. They are then taken out, spread on dishes, flattened, and dried in the sun. A small quantity of the syrup should be occasionally sprinkled over them whilst drying, after which, pack them down in boxes, treating each layer with powdered sugar. The syrup may be concentrated and bottled up for use. They keep well from year to year, and retain surprisingly their flavor, which is nearly that of the first quality of fresh figs. The pear-shaped or single tomatoes answer the purpose best. Ordinary brown sugar may be used, a large portion of which s retained in the syrup.—*West. Far. & Gard.*

Pork Making.

The subjoined paper we copy from the New Genesee Farmer; it is from the pen of Dr. *Lee*, one of the brightest Agricultural intelligences in the country. He is essentially, practically, theoretically, and in feeling, a *farmer*. We need not tell the enlightened reader, that the article is written by a gentleman of knowledge, for it bears upon its face that which will be a passport to the judgment; but we will ask all, to read it, study it, digest its contents, and profit by its advice. The time has come, when husbandmen must look about them for objects to diversify the productions of the soil, and we are pleased to perceive that Dr. L. has pointed out, in this communication, the means of adding one other to the production of the farm:

On Making Pork.

Pork has advanced some two dollars a barrel, within the last six weeks, in New York market. An unusually large number of swine have been driven from Ohio east, and mostly to Massachusetts, this season. The very general, and most disastrous floods in the western country, have destroyed an immense amount of corn along the river bottoms where most of this crop is grown. Last winter, when pork in the hog was worth six dollars per hundred pounds in Boston, to be shipped to Nova Scotia, and thence to England, it was selling at three dollars in this city. The wide difference in price was owing to the fact, that the railways between this and Albany were denied the privilege of carrying freight. The last legislature very properly removed this obstruction to sending our pork to an eastern market after the close of the Erie canal in the fall and winter.

In view of the above facts, and the circumstance, that large and increasing numbers of fat hogs are being tried, or rendered by steam into lard, save only the hams, for the manufacture of *oil* and *stearine*, it is believed that the making of pork in western New York will now become, with skilful management, a profitable branch of rural industry. Recent advices from the West Indies and South America, give us reason to expect an excellent market in that quarter of the world, for *lard*, *oil*, and hard stearine candles.

In making pork two things are to be carefully studied: —One is, to select food best adapted to the object in view, and to prepare it in that way, which will enable the digestive and assimilating organs of the animal to elaborate for its owner, the largest possible amount of flesh and fat, from any given amount of raw material consumed.

Without wishing to disparage the use of other articles, I will take the liberty to name potatoes, peas, and corn, as varieties of food that can be cultivated to good advantage in this latitude, and made into pork. Pigs should have a good pasture in summer, and warm, comfortable quarters, and plenty to eat during the winter. Potatoes should be cooked either by boiling or steaming. If they are boiled, the water takes from the root a very poisonous extract, called *necotin*, and hence the water so affected ought to be thrown away, and not mixed up with the food. It is proper to state, however, that the amount of necotin in good potatoes is not large, and many think the water in which this root has been boiled, not particularly injurious to swine.

That the philosophy or *rationale*, of cooking potatoes, corn and other grain, may be understood, I would remark that if a raw potatoe, or raw flour (the potatoe being grated) be washed in cold water, the whole, or nearly the whole of the starch will settle to the bottom of the vessel, in the form of an insoluble white powder. If the potatoe be cooked, and the flour be made into bread or pudding, the heat, applied to these articles of animal food, changes the *insoluble starch into a soluble gum*. Now, neither the heat, nor the gastric juices in the stomach, can entirely effect this important chemical change. Hence, if the reader were to take into his own stomach, a quantity of raw grated potatoe, or of raw flour or Indian meal, far less of the nutritious properties of the root and the grain will be dissolved, and taken up by the lacteal vessels into the circulating blood, than would take place if the potatoe, meal and flour were well cooked.

From some experiments of my own, and considerable research into the published results of the experience of others. I am satisfied that ten bushels of boiled potatoes, thoroughly mixed with the pudding that can be made from three bushels of corn or peas, will make as much pork as twenty bushels of potatoes, and six bushels of corn or peas fed raw.

I once had a large wooded vat having a copper heater running through it, in which I could boil, easily, fifty bushels of potatoes at a batch, and then draw off the water in which the potatoes were boiled, so as to leave them clean and dry to be mixed when hot with corn, oat, pea, or barley meal. The vat was made for boiling tan bark, in connection with a leather factory. A cart load of potatoes could be placed under a large jet of water, and the roots be thoroughly washed in a few minutes, when the load could be dropped at once from the cart body on to a platform, so that all the potatoes would roll, if desired, into the cooking vat.

At this time, our founderies are making stoves with large boilers fitted to them, which I doubt not, will answer a good purpose for cooking roots and grain for swine.

Salt performs an important office in the vital machinery of all warm blooded animals. Hence, all food, and especially when cooked, should be reasonably salted. With a convenient apparatus for cooking potatoes, and corn (the latter should be boiled and pounded, if not ground) and with twenty acres of rich land, well cultivated in these articles, for the manufacture of pork, a farmer, with a small farm, can turn off many dollars' worth every year. Something of this kind, in connection with the dairy business, might be made extremely profitable.

As yet, I have barely hinted at one branch of my subject. The other thing to be carefully studied, by the manufacturer of pork and lard, is the improvement of the organic structure and functions of the living machinery, by the action of which, these valuable products are obtained. The farmer can not be a close observer, who has never noticed, that one hog will yield its owner nearly double the quantity of flesh and fat, from any suitable food that he obtains from a like amount of food consumed by another, and quite inferior animal. Certainly a pig is a living machine, and it is no less certain, that the size and function of every part of this machine, may be improved by skilful management or greatly injured by bad management. Somebody has manufactured Berkshire and China pigs, from a race which was once the coarse, ugly, furious, wild boar and sow. This transformation, by the light and aid of modern physiological science, can be effected now in a twentieth part of the time it took those of our own race, who have achieved this important result.

But my sheet is already nearly full, and at present, I will only say, be careful to select and propagate the choicest breed of hogs within your reach. If one breed will make twenty-five per cent more pork and lard from a given amount of food than another, by all means procure the better breed. Other things being equal, nothing conduces more to the production of fat and soft muscle than perfect quietude. A dark pen is better than a light one, for the reason, that in such a pen, a fattening hog will sleep more, and waste less of the elements of his food by increased respiration and exercise.

D. L.

Lucerne.—A 'Subscriber,' at Strawberry-Hill, North Carolina, asks for some information on this subject.

A deep, rich, and rather light soil, is best for lucerne, and it is hardly worth while to attempt its cultivation on soils of an opposite description. The preparation of the ground consists in deep plowing, and fine pulverization. Any kind of manure suitable for clover, may be used—mixed well with the soil. It may be sown either broadcast, with some kind of spring grain, or alone in drills. We prefer the latter, for the following reasons. When sown broad cast, with or without grain, its growth is much checked, either by the grain or weeds, or by both—if a drouth occurs at the time the grain is taken off, a large portion of it dies, and what remains is so injured that the succeeding winter probably kills it. After repeated trials, we have found it very difficult to get it through the first summer and winter. Unless the weather is very favorable, so much of it dies, that it is left too thin. Having failed some half dozen times in the broad cast mode, we tried sowing in drills with a machine, and succeeded completely. The drills were about ten inches apart, and the spaces were hoed once or twice, by which means the weeds were kept down, and the lucerne grew so rapidly that it was cut three times the first season—only about a month being required between the cuttings, to produce a growth of more than a foot in height. It produced at the rate of five tons of *hay* to the acre.

We should prefer sowing as early in the spring as the ground would admit of, in order that the lucerne might get a start of the weeds. In the broad-cast mode, fifteen or sixteen pounds of seed is recommended—in the drill mode, eight or ten pounds, if properly sowed, will be sufficient. There is no necessity of permitting a crop to go to seed, as our correspondent suggests, as the roots are considered perennial—at any rate, they live many years. In regard to the marls mentioned, it would be better to try them, as well as lime, plaster, &c., for the effect of these cannot be positively foretold.

The seed might be had at any of the principal seed-stores of our cities. Its cost is from twenty-five to thirty-seven and a half cents per pound. By the quantity it could probably be had for less.

Lucerne is greedily eaten by all kinds of stock, and it is considered highly nutritive. It may be fed green or made into hay. We know of no plant of equal value for soiling. Its growth commences very early in the spring, and continues without interruption through the whole season. No ordinary drouth affects it in the least, after it once gets fairly rooted. The roots have been traced to the depth of more than three feet in the earth, the first season, when sown in drills. The only cultivation that it requires after the first season, is an occasional harrowing before it starts up in the spring.—*Albany Cult.*

We noticed some time in the early part of summer, a patch of Lucerne which had been cut *twice*. On the 12th of August last, we saw it again, when it was in full bloom for the third time this season, and fit for cutting. Had it been then cut and the ground top-dressed, we have no doubt but that it might have been cut the fourth time before frost. We make this note in connection with the above article, to bear testimony to the value of this fine grass, in the hope that its general culture may be undertaken for purposes of soiling.

Prairie Wheat Growing.

The wholesale way in which harvesting is carried on in the broad and fertile fields of *Pairie Ronde*, Michigan, where six thousand acres of wheat all in a body stood this year, is thus described in a letter to the New York American:

The harvesting is done after a fashion unknown in our region of three or four acre fields. A resident of the prairie has invented a machine, which he lets out at $3 per acre, which cuts the grain, thrashes it, cleans it, and puts it in a bag ready for the market. It is drawn by eight yoke of cattle, or as many pair of horses, requires the attendance of eight or ten men, and finishes from twenty to twenty-five acres a day. The cattle are beside the machine and urge it onward. As it proceeds it cuts the grain near the head, the straw being of little or no value here. This is rapidly passed through the other processes, and is turned out into a sort of hopper behind, from which it passes into a bag; that, as fast as filled, is carried to wagons in attendance, and replaced by others; so that wheat standing in the morning may be flour before night. All the grain and oats are thrashed by machines worked by horses, a flail being scarcely ever used.

The above will give our readers some idea of the illimitable extent to which the enterprising people of the new western states and territories, have carried the cultivation of wheat—an extent which bears no relation whatsoever to the present demand; for except what finds market at home, there are comparatively but few consumers, the *export* for foreign consumption being trifling in the extreme; and so far as England is concerned, there are many neighborhoods of a few acres in extent, the locations of manufacturing establishments, which consume more bread-stuffs than all England and her dependencies put together.

Remedies. Mr. Ellsworth, alluding to the valuable discoveries that have recently been made in medical science, notices the immediate relief which may be obtained from that most painful of diseases, tic diloreaux, by the simple topical applicatof ammonia; and the allaying, in the most speedy and fectual manner, the paroxysms of delirium tremens, the use of carbonate of ammonia.

From the N. E. Farmer.

THRIFTY AND UNTHRIFTY FARMING.

Friend Breck—I recently made an excursion of some distance in the country, and tarried for a short time in a farming community, where the first eighteen or twenty years of my early days were spent. Many years have elapsed since, and other pursuits have engrossed my time and attention. Yet, often my mind reverts to the scenes of youth, and memory rolls back the recollections of other days, when, in common with all the rural community in which I resided, I felt all the joyous hope of seed-time, entered with zeal into all the labors and excitement of haymaking and harvest, and shared in all the frolic and glee of husking parties; and in all the thoughtlessness, and buoyancy of youth, looked forward for thanksgiving, as the very best of all the days in the year.

In visiting the place after an absence of some twenty or more years, I found many striking changes had taken place; many an honest, brawny limbed farmer, then lord of his broad acres, now occupies but his six feet by two, in the "auld kirk yard;" and others that were then in the vigor of manhood, and had been spared, were bowed down with age, and their thick locks had been plucked by the fingers of time, or silvered o'er by the frosts of 70 or 80 winters. Many of my schoolmates who were then wild and reckless youths, with whom I had an hundred times tried the "tug of war" at *long hold* and *side hug*, were now staid and steady farmers—heads of families engaged in all the business scenes of life. And of the bright eyed, flaxen-haired lasses, many were transformed to sober and careful housewives and mothers,—and others were quietly sleeping the slumber that knows no awakening—most of whom had been carried off in all the bloom of youth and early womanhood, by that scourge of New England —consumption.

But as the whole country was covered with snow, I could not make much of an agricultural survey, but upon inquiry, I learned that many farms had from bad management and culture very much deteriorated, and greatly lessened in value; others had held on the even tenor of their way, and wintered about the same number of cattle they did formerly, and some few in the hands of enterprising, intelligent farmers, were advancing with a sure and steady pace, that would yearly add to their value, and to the wealth of their owners.

There had been several causes in operation to exhaust the first named class of farms—such as plowing the lands in the autumn, where much of the finer portion of the soil was blown off by the winds, and washed by the rains and melting snows, and suffering their cattle to roam over their mowing fields, both fall and spring, with a reckless waste of their manure.

In conversation with one of those farmers (a Mr. G.,) whose farm had run backwards, I suggested to him the idea of collecting the leaves and decaying vegetable matter from a piece of woodland near by. "Why," says he, "I haint much opinion of this vegetable matter—'tis sour stuff—only give me dung enough from the hovel windows, and I can raise as good crops as Mr. I. does, with all his swamp muck, lime, compost, and book-farming." I inquired if he took an agricultural paper. "No," said he—"I did take one several years ago, and that had so much to tell about a new kind of potato, that they sold for twenty-five cents a pound, and after all, it warnt no better than the long reds; and about tree corn and mulberry trees; and a good many farmers got *bit* by believing their great stories, that I got sick of, and stopped it, and would not take the gift of one."

I afterwards called upon Mr. I., the "book farmer," as Mr. G. sneeringly called him, and found him a middle-aged, intelligent farmer, who was quietly improving his farm by every means within his reach. I was so much interested in his management, that I thought I would attempt to communicate an account of it to the public, through the columns of your useful journal, with the hope that other farmers might be benefitted by his example.

Upon looking into his barn, I found his hovel floors were water-tight, and sloping toward the back side. In the rear of the cattle, was a kind of trough of the width of 12 or 15 inches, made by sinking one of the floor plank two inches; this was also water-tight: the droppings from the cattle mostly fell into the trough, and by giving the cattle a good bedding of litter every night, they were kept comfortable, and nearly as clean as when at pasture.—He had the past winter used several loads of saw-dust from a shingle mill, and leather shavings from the currier's, for the purpose of bedding, and soaking up the urine. The hovels were daily cleared out by wheeling the manure and litter into the centre of the yard, (which is dishing,) and piling it up in a snug heap. His barn is so situated he cannot dig a cellar under it, but intends the coming season to build a shed for the purpose of keeping his manure under cover in future. The floors of his horse stable are tight: every day it is cleared, and the manure and litter is spread under a shed, and by being trodden by his stock, it does not heat and firefang, as is too often the case. Most of his winter manure will be mixed with swamp mud, to compost through the summer. I inquired respecting a heap near his barn: he said there were two cartloads of lime-mortar, that he bought for a trifle, of a man who had taken down a large house: it was mixed with about four loads of brake-root turf, about 18 months ago; it had been left this length of time for the purpose of having the plaster come to pieces, and rotting the turf. Last fall it was shovelled over and two lime casks of fleshings, procured at the tanner's, mixed with it. He thought while this animal matter was decomposing there would be a large amount of nitrogen generated, and give him a large amount of nitrate of lime by spring, when it would be again shovelled over, and 35 bushels of good ashes mixed, and then applied to an acre and a half of ground, upon which he should sow wheat: I think he said the compost was to be put on after the ground was plowed, and to be harrowed in with the wheat. The ashes he had purchased at ten cents per bushel.

He had a cartload of the waste wool, or flyings, from the wool carder's; this was to be boiled for a short time in lye, to cleanse the oil and grease, and to render the wool more decomposible. By way of experiment, a part of it would be used to manure some of his corn and potatoes in the hill, the rest would be mixed in the compost heap, to remain a year or so. He also had a large quantity of old woolen rags, that he bought of a store-keeper for a trifle—having, he said, read in some book, that 100 lbs. of woolen rags contained as much nitrogen as 3000 lbs. of cow manure. Some of these rags were to be chopped up and steeped in urine for a few days, then to be partially dried and sprinkled with gypsum, and used as manure in the corn and potato hills; the other part would, like the waste wool, be composted. He had a number of casks of fleshings that were obtained at the tanners, which would be mixed with vegetable mold soon as the snow was off, and he could obtain it; he has also taken the hair, lime, and piths of horns from the tan-yard; the bones are broken up by the hammer and mixed with manure and plowed in; they will slowly decompose, and supply phosphate of lime to his land; he had about two barrels of the settlings of salts from the pearlash factory—similar, he thought, to the material known as glass factory manure; an account of its use and value is given in Mr. Colman's Fourth Report, pages 344-5 by a Mr. Jarvis. There were a few inches of ley upon the top of the salts in the barrels, so strong as to float an egg with nearly one half its surface above the ley. This, he assured me, according to Mr. Jarvis' statement, would convert 10 or 15 loads of loam or muck into a compost equal to the same amount of good stable manure. All these materials, sawdust, wool, fleshings, hair, lime, piths of horns, and salts from the potash, he had for removing, as they were considered a nuisance, and of no value by the manufacturers or owners. The droppings of the fowls are occasionally scraped from the boards, over which the hens roosted, and put in old casks: in the spring it will be moistened with urine and ground to pieces with a hoe, and mixed with plaster of Paris, to be applied to grass land, or put about the corn and potato hills, at the first or second hoeing;—he styles it "Yankee guano." He has a strong tight box under his back house, in which is frequently thrown gypsum, or charcoal dust obtained from the coal-pen of the village blacksmith: it absorbs the smell, and once in a week or two, the contents of the box are mixed with dry peat or sawdust, or some other material, to absorb the liquid part, and put into old tight barrels. This is home-manufactured *Poudrette.* His hog yard is of good size, has been dug to the depth of 18 inches, and a good plank floor over the whole, which makes it easy shovelling out the manure. The suds from the wash are conveyed to it by a spout, which with the manure of his hogs, mixed with the loam, muck, and other materials, makes many loads of valuable manure. He has tried many experiments that he has seen recommended in the agricultural books and papers, that he has read; says, after he became "one and twenty," he did not feel obliged in all things to follow in the "footsteps of his worthy predecessor," his father, and sometimes pursued a new track, and went upon his own hook. He intends getting a small quantity of guano and ground bones the coming spring, for the purpose of testing them by the side of other manures. Several of the kinds he has not yet tried, but from his remarks, I feel satisfied he will find them all invaluable helps for increasing his crops, and from the nature of some of them, valuable and permanent improvers of his soils.

If you think anything I have written, is worth publishing, it is at your service.

———— ————.

Salem, April, 1844.

From the American Agriculturist.

BUTTER-MAKING.

The following communication was addressed to Frederick J. Betts, Esq., President of the Orange County Agricultural Society, and politely tendered us for publication; and as Mr. McWilliams' dairy enjoys a high reputation, we do so with great pleasure, notwithstanding other articles on this subject have already appeared in both our last and present volumes. Mr. McW., we see, differs slightly in his process of making butter, from those before described, by adding cold water to the milk when poured into the churn, and commencing churning it at a lower tempertature than usual. This must certainly increase the labor of bringing the butter, and we should like to know of him whether it is compensated by superior quality or an additional quantity.

SCOTCHTOWN, Jan. 3d, 1844.

Dear Sir,—Having received your note of October 20th, wishing me to give a minute description of the process of my way of making butter, I cheerfully comply with your request, willing to give what little information I am in the possession of, and hoping to get more from the statements of several of our best butter-makers.

My farm consists of 103½ acres of land, 85 of which are under cultivation. In my dairy, I keep from eighteen to twenty cows. The farm is elevated land, suitable for grazing.

Our practice is not to churn the milk until it becomes thick or loppered; the milk and cream are then churned together. The temperature of the milk is about 50 degrees. In warm weather, about a quart of cold water is put in each pan before the milk is strained, so as to keep it sweet as long as possible. The cellar-floor is brick. This in warm weather is daily cleansed with cold water. A drain from the cellar carries off the water thus applied. The churn is filled about half full with milk, with the addition of two pails of cold water before starting the churn. In cold weather, the same quantity of warm water is applied. When the churning is finished, which usually occupies about two hours of time, there are then two more pails of cold water applied, to raise the butter and cool it. The butter is then taken out of the churn, and put in a large tray; this is immediately filled with cold water and the butter carefully washed; after which the water is thrown off. The butter now undergoes the process of salting; it is then placed in a cool situation, where it stands about an hour, and worked carefully over. This finished, it is placed in the same situation as before, where it stands three or four hours, and is again worked over; again replaced for five or six hours, when it is worked over for the third time. It is now replaced, where it stands till the next morning, and then worked over for the fourth time. A small quantity of nitre is then put in the butter. Thus finished, it is placed in firkins holding about 85 lbs. Previous to packing, the firkin is scalded with hot water, rinsed and cooled with cold water, then rubbed all around with fine salt; this prevents the butter from adhering to the sides of the firkin. When the firkin is full, a linen cloth is placed over the top of the butter; on the cloth a covering of salt is put one inch deep, and cold water enough added to it to form a brine. It then stands till it is to be sent to market, when the cloth and salt are removed, the firkin turned down, the top of the butter in the keg washed with cold water, and the pickle drained off. The firkin is now neatly headed up and sent to market.

GEO. S. MCWILLIAMS.

From the United States Gazette.

REVIEW OF THE WEATHER, &c. FOR JULY, 1844.

We are indebted to an obliging friend, who kept our dairy of the weather for July, during our eastern tour. The result is as follows:

The month commenced warm, with the mercury ranging, at two o'clock on the first three days, from 84 to 89. On seventeen other days, the mercury ranged from 81 to 85 at the same hour, and on one day (the 14th) it rose to 92.

The medium or average temperature of the whole month (including the 24 hours of each day) was 74; and it is a singular fact that the medium of the five preceeding months of July were exactly the same.

There were no violent storms in this vicinity during the month, yet rather more than the usual quantity of rain fell, while some portions of the United States suffered severely by drought. Some rain fell in this city and vicinity on thirteen different days, and the whole quantity which fell was 5¼ inches. The quantity which fell in July, 1843, was 4½ inches; but in July, 1842, there fell 12 inches, which is the largest quantity in any one month that we have on record. C. P.

—

FOR AUGUST, 1844.

The month just closed furnished a series of the most delightful weather ever enjoyed. It is true, however, that there were a few very warm days, but the mornings and evenings, for the most part, were temparate, refreshing and healthful. On the 17th, the mercury at mid-day rose at 93, and on the 20th, to 90. On seven other days, at the same hour, it ranged from 85 to 88. Ten days from 80 to 84. The remaining twelve days it ranged from 70 to 80, during mid-day.

The medium or average temperature of the whole month (including the 24 hours of each day) was 73. That of August, 1843, was 75. Of August 1842, was 72. Of 1841, was 71. Of 1840, was 74. Of 1839, was 70. Of 1838, was 77. Of 1837, was 74; and of August, 1836, it was only 67, which was the coolest month of August for 25 years; and August, 1838, was the warmest, the medium temperature being ten degrees higher. The whole summer of 1838 was intensely hot.—During the month just closed, there was but little cloudy or falling weather.

Only 2 4-10 inches of rain fell during the whole month. That which fell in August, 1843, was 4½ inches.

A more prolific season for fruit and vegetables has not occurred in the United States for half a century. The trees have not only bent, but actually broken, under their burdens; and the abundance of vegetables is almost without a precedent. A Jersey farmer informed us that he would be glad to sell many thousand bushels of fine apples for 12½ cents per bushel, delivered in Philadelphia. Many thousand baskets (three pecks in a basket) of excellent peaches have been sold in Philadelphia, the present season, from 25 to 50 cents per basket. The wheat, rye, oat, and early potatoe crops have been very abundant; and the Indian corn, buckwheat, and late potatoes look very promising.

Nearly five inches of rain fell in Charleston, S. C., on the 5th August, during a violent shower of less than an hour and a half, says a paper of that city.

Part of the States of Indiana and Illinois were almost inudated by repeated and powerful rains during the forepart of the month of August.

The floods of the Mississippi and Missouri have been attended with great destruction of property. The newspapers from that quarter say, "the rain has fallen largely all over the western waters which are tributary to the Mississippi, and have been very disastrous, by causing inundations, which have swept away houses, barns, cattle, swine, and poultry, by thousands. In Johnson county, Mo. Isaac Cox and wife, and four children, were swept away in their house, and all were drowned." A late paper says, "the brake at Bonnet Carre is increasing being 150 feet.—The plantations, four miles above and five below, are entirely under water, and all hopes of stopping the crevasse, at the present stage of the water, is abandoned." A later paper still, says, "the Levee is breaking in new places almost every day, and more or less rain is continually falling. At all the settlements and plantations on the Mississippi, above Vicksburg, great sickness prevails. The weather was a little cooler yesterday, the mercury being *only* 95!!"

On the 9th Aug. John and James Clendenon were instantly killed by lightning in Springfield, Indiana, while under a tree, during a thunder shower. We have read many accounts of lightning having struck and fired barns and other buildings the past month.

From six to seven o'clock, P. M. on the 19th Aug. there was one of the most violent thunder showers in Philadelphia and vicinity experienced during the whole season. The thunder was very heavy, and lightning very vivid, and the rain poured in torrents. The lightning struck in several places, but we heard of no one being killed.

On the 14th Aug. there was a tremendous storm of wind, hail and rain at Hagerstown, Maryland, and the paper says, "the hailstones were three inches in circumference, and the wind was furious; it swept, and whirled, and twisted, and twirled through the town with the *largest liberty*. Signs, awnings, boxes and barrels were hurled about as if they had no owners, while the liberty poles of the politicians were bent to an angle of 45 degrees.

By the inudation which récently occurred at Adana, (Turkey,) more than twelve hundred persons perished, and property to the amount of eight millions of dollars was destroyed.

There are 22 lard oil factories in Cincinnati, which manufacture six hundred thousand gallons per annum, valued at fifty cents per gallon.—There is also five linseed oil mills, which make nine hundred gallons per day. Ploughs are also manufactured there, which are driven by steam. Cincinnati is rising rapidly. C. P.

Philadelphia, Sept. 2, 1843.

BALTIMORE CO. AGRICULTURAL SOCIETY.

At the annual meeting of the Society held at Govanstown, on the 20th day of October, 1843, the following resolution was adopted:

"*Resolved*. That such counties of Maryland as may form societies auxiliary to this, shall on the payment of fifty dollars to the Treasurer of this society, be admitted on equal terms as regards competition for premiums, if in the opinion of the Executive Committee, such an arrangement shall appear to be expedient."

The Executive Committee at a meeting held in Baltimore, Dec. 23d, 1843, having fully concurred in the above resolution, do cordially invite the farmers of the counties of the state to form auxiliary societies, and become competitors for premiums offered by this society. JOHN H. B. FULTON, Rec. Sec.

FOR SALE, THAT VALUABLE FARM & MILLS,

Known as the Mansion Farm or Owings' Lower Mills, situate 11½ miles from the city, on the Reisterstown turnpike, upon which it binds for half a mile, having the Westminster branch of the Susquehanna rail road within 200 yards of the dwelling. This Farm contains about 416 acres, 80 acres of which are in wood, the greater portion of the residue in a high state of cultivation, having had near 10,000 bushels lime put on it the last few years—the growing crop of wheat, rye, oats, &c. &c. looking remarkably well, the meadow comprising about 100 acres is prime land, which has recently been reset.

The improvements consist of a large and well built brick Mansion House, 60 ft. front by 40 ft. deep, exclusive of the back and side additions. A substantial large brick Barn, having stalled stabling underneath for 25 head of cattle, wagon and carriage houses, dairies, smokehouse, blacksmith's shop, corn houses, &c. &c.

A good brick GRIST MILL, with a comfortable stone Dwelling for the miller; the mill is in good order, and can grind 40 bbls. of flour per day, which quantity could be increased with a trifling expense.

An excellent SAW MILL has recently been double geared and capable of cutting 2000 feet per day; these mills have a good run of country custom, with an abundance of water at all seasons of the year, the fall of water being about 30 feet. Additional works might be erected at other sites on the premises.

This farm could conveniently be divided, having on the upper portion of it, in addition to the above improvements, a frame dwelling and log cottage, with a good barn and stabling. The whole property is in superior order and repair. The proprietor residing out of the state, is disposed to sell it for less than its value, on accommodating terms. Any person desirous of viewing the premises can do so by applying to the manager on the premises. For terms of sale and further particulars apply to

REYNOLDS & SMITH,
je 26 No. 40 N. Howard st.

AYRSHIRE BULLS.

Several young Bulls for sale, of this valuable dairy stock; they are from stock selected with great care in Scotland, for a gentleman of this vicinity. One of the bulls is one year old—his appearance is impaired by an injury received in his hip from another bull but not of a nature to prevent his being fit for service. Price $50, deliverable in this city. One other Bull, 4 months old, another 1 month old, dams very superior milkers: the dam of the younger gives when fresh between 7 and 8 gallons a day.

Likewise a 15-16 Durham bull Calf, 4 months old, sired by the celebrated bull "Washington Irving," a fine, handsome calf. Either of the calves can be had for $50. Call on S. Sands, at this office. je 12

HUSSEY'S REAPING MACHINES.

HEMP CUTTERS,
CORN & COB CRUSHERS,
CORN SHELLING and HUSKING MACHINES, &c.
Made to order and kept for sale by the subscriber,
Ap. 17. OBED HUSSEY.

BALTIMORE MARKET, Sept. 11.

Beef, Balt. mess,	8¾a	Butter, Glades, No. 1,	13a
Do. do. No. 1,	6¼a7	Do. do. 2,	7a11
Do. prime,	5a	Do. do. 3,	5a7
Pork, mess	10	Do. Western 2,	6a
Do. No. 1	9¼a9¾	Do. do. 3,	5a6
Do. prime	8	Lard, Balt. kegs, 1,	6¼a7
Do. cargo,	a	Do. do. 2,	none
Bacon, hams, Ba. lb	6¼a7	Do Western, 1,	a6¾
Do. middlings, "	5a5¼	Do. do. 2,	5a5¾
Do. shoulders, "	4a4¼	Do. do. bls 1,	6a6¼
Do. asst'd, West.	4¼	Cheese, casks,	6
Do hams,	5a7	Do. boxes,	5a8½
Do. middlings,	a5	Do. extra,	12a15
Do. shoulders,	3¾a4		
COTTON—			
Virginia,	9a10	Tennessee, lb.	
Upland,	9	Alabama,	11a12
Louisiana,	11¾	Florida,	10a12
North Carolina,	10a11	Mississippi	
LUMBER—			
Georgia Flooring	12a15	Joists & Se'ling, W.P.	7a10
S. Carolina do	10a12	Joists & Se'ling, Y.P.	7a10
White Pine, pann'l	25a27	Shingles, W. P.	2a9
Common,	20a22	Shingles, ced'r,	3.00a9.00
Select Cullings,	14a16	Laths, sawed,	1.25a 1.75
Common do	8a10	Laths, split,	50a 1.00
MOLASSES—			
Havana, 1st qu. gl	30a31	New Orleans	31a
Porto Rico,	29½a30	Guadaloupe & Mart	26a28
English Island,		Sugar House,	28a36
SOAP—			
Baltimore white,	12a14	North'rn, br'n & yel.	3½a4½
brown & yell'w	4½a5½		
TOBACCO—			
Common	2 a 3½	Yellow,	8 a10
Brown and red,	4 a 5	Fine yellow,	12a14
Ground leaf,	6 a 7	Virginia,	4 a 9
Fine red	6½a 8	Rappahannock,	
wrappery, suitable		Kentucky,	3 a
for segars,	8a13	St. Domingo,	13 a11
Yellow and red,	7a10	Cuba,	15 a38
PLASTER PARIS—			
Cargo, pr ton cash	2.75a	Ground per bbl.	1.12a
SUGARS—			
Hav. wh. 100lbs	9a10.50	St. Croix, 100lbs	7.00a8.00
Do. brown	a7.50	Brazil, white,	a
Porto Rico,	6.70a7.50	Do. brown,	
New Orleans,	6¼a6¾	Lump, lb. c.	
FLOUR—We quote			
Superfine How. st., from stores, bl.			$3.93a4.
Do. City Mills,			4.
Do. Susquehanna,			4 a
Rye, first			2.87a
Corn Meal, kiln dried,		per bbl.	2.62
Do.		per hhd.	11.75
GRAIN—			
Wheat, white, p bu	90a100	Peas, black eye,	50a55
" best Pa red	15a	Clover seed, store	$5.50a
" ord. to pri. Md	70a85	Timothy do	2.a2.50
Corn, white,	40a41	Flaxseed, rough st.	1.35
" yellow Md.	43a45	Chop'd Rye, 100 lbs.	1.25
Rye, Md.	a52	Ship Stuff, bus.	20a
Oats, Md.	20a21	Brown Stuff,	15a
Beans,	101	Shorts, bushel,	10a
FEATHERS—perlb.			29a
COFFEE—			
Havana,	7 a 8	Java, lb.	10 a12
P. Rico & Laguay.	6¾a 8	Rio,	6¾a7¾
St. Domingo,	5¾a 6	Triage,	3¼a 4¼
CANDLES—			
Mould, common,	9a10	Sperm,	32a33
Do. choice brands,	10¾	Wax,	60a65
Dipped,	8a 9		

20 a22 cts. We quote Rye at 50 a 52 cts.

Tobacco. The transactions in Tobacco have been small during the past week, especially in Ohio and other Western Tobacco. The qualities now on hand, of all kinds, are principally common and inferior, and the demand for these grades is quite limited—consequently the operations are of no great amount. There is not much very prime tobacco now in market; this quality, however, sells readily and at good prices, being always in active demand. We gather up, as the transactions of the week, about 150 hhds. Ohio and Kentucky at $3,50a12; and 536 hhds. Maryland at various prices ranging from the extremes of $2 to $14, and $16; the most of it, however, was sold at $3,25a3,50. We quote as follows for Maryland, for frosted $1.50 to $2; common and middling $2 to $5; good $5,50a7, fine $7,25a12. We quote for Ohio, com. to middling $2,25a4,-50 good $5a6, fine red and wrappery $6,-50a$10; fine yellow $8.50a12; and extra wrappery $11 a13. The inspections are 1576 hhds. including 1128 Md. and 448 Ohio.

NEW AGRICULTURAL ESTABLISHMENT,

At the old stand formerly occupied by JOHN T. DARDING, *fronting on Grant & Ellicott streets, adjoining Dinsmore & Kyle, Pratt st. wharf.*

G. H. BRYSON & J. JOHNSON,

Having entered into a co-partnership under the name G. H. Bryson & Co., offer for sale at reduced prices, a great variety of Ploughs, Casting, &c., as

Davis,	Hill Side,	Grain Cradles,
S & M.	Sub Soil,	Cutting Box,
Chenoweth,	Freeborn & Hitchcock,	Corn Shellers,
Woods,	Cultivators,	Corn and Cob
Wiley,	Harrows,	Crushers, &c.
Bar Sher,	Wheat Fans,	

Ross' Patent Hay and Straw Cutter, and every variety of FIELD AND GARDEN SEED.

Repairing done on the lowest terms. Castings by the ton or otherwise. A liberal discount allowed to those who buy to sell again. aug 21 G. H. BRYSON & CO.

HARVEST TOOLS.

In store and for sale by J S. EASTMAN, Pratt street, near Charles, Wolf's very superior Grain Cradles, (such as I have been selling for the last five years;) Grain and Grass Scythes; steel and wood Hay Forks; an assortment of Hay Rakes, Horse Powers and Threshing Machines, of different patterns, for 2 and 4 horses; Wheat Fans, plain and expanding Corn and Tobacco Cultivators, Corn Planters, my superior Straw Cutters, of all sizes, with wood and iron frames. Also a large assortment of PLOUGHS, of all sizes, and other farming implements. May 22

PERUVIAN GUANO.

The subscriber, agent for the Peruvian Company, has received per ship Orpheus, 400 tons of Guano—Peruvian Guano—and will hereafter be regularly supplied with the article by the Company, *who alone have the right to export it.*

Orders for any quantity, (not exceeding one ton) will be supplied at the following rates,—

From 1 to 5 tons,	$3	per 100 lbs.
" 6 to 10 "	$2,87½	" "
Above 10 tons,	$2,75	" "

A Pamphlet upon the nature, properties and results of this Guano, will be issued from the American Farmer Office, in a few days free of charge.

Applications post paid, will meet with prompt attention.

SAML. N. GEORGE,
sep. 5 No. 2 German st., Baltimore.

CATTLE SHOW,
AGRICULTURAL EXHIBITION & PLOUGHING MATCH.

The Baltimore County Agricultural Society will hold its third annual FAIR on WEDNESDAY AND THURSDAY the 23d and 24th days of October, 1844, at Govanstown, 4 miles from Balti more on the York Road.

The PLOUGHING MATCH will be held on the first day.

The ANNUAL ADDRESS will be delivered on the second day.

The Executive Committee do not deem it necessary to present at this time a list of the various articles for which premiums will be offered, but assure the public that they are determined to go the very extent of their means in encouraging the various branches of Domestic industry, and in endeavoring to excite an increased emulation in cultivating the soil, in raising the most improved breed of stock, and in the manufactures of husbandry. Encouraged by past experience, the Committee appeal with confidence to the Farmers, Mechanics and Manufacturers, and above all, to the ladies of the City and County to aid them by their presence and contribution, to make the Fair of 1844 an event of surpassing interest to our Agricultural friends and the public generally.

HENRY C. TURNBULL,
WM. GOVANE HOWARD,
JNO. B. H. FULTON,
Committee of Arrangements.

op 5

NEALE & LUCKETT, *No.* 3, *Light street & harf.*

Have received from a gentleman in Maryland, a supply of FLY PROOF WHEAT for Seed, which they offer for sale at $1¼ per bushel. This is a very superior wheat, weighing from 60 to 65 pounds to the bushel, yielding largely upon lands of tolerably quality, safe from the ravages of the fly, and making a rich and very nice flour. It is of German origin, and a different species from the *Mediterranean wheat*, which it is believed does not yield good flour. Persons wishing to supply themselves with seed, are desired to call and examine the sample now on hand. A few hundred bushels more can be obtained from the same source, if early application be made. Aug 28

EXTENSIVE SALE OF DURHAM CATTLE.

On THURSDAY, the 26th of September next, at 10 o'clock, at the Exhibition ground of the Philadelphia Agricultural Society, Rising Sun Village, on the Germantown Road, 3 miles from Philadelphia, will be sold—A superior lot of improved Short Horns, from the celebrated herd of James Cowen, Esq. of Mount Airy, consisting of young Bulls, Cows, Heifers and Calves, of high blood, imported, or immediately derived form imported animals of great repute.

Also some fine young Heifers, from one half to seven eighths blood, sired by Leander, Son of Dairy Maid.

Mr. Gowen assures us that this sale will in point of numbers and character, far exceed his sale of 1842. Leander and Colostra, the younger, will be among the Bulls; and the celebrated Dairy Maid, the beautiful Cleopatra, Walnut, and Miss Model, among the Cows to be offered.

☞Catalogues will be ready in due time, and the Cattle will be on the ground for exhibition two days previous to the sale.

We invite the special attention of Breeders and the lovers of fine stock in general, to this splendid selection of Cattle. S excellent an opportunity for procuring fine specimens of the best Durhams, but seldom occurs. WOLBERT & HERKNESS,
aug. 28 Auctioneers.

AGRICULTURAL MACHINERY,
Manufactured by Robt. Sinclair Jr. & Co. No. 60 *Light street, viz:*

Corn Mills, price	$40	most approved)	8 to 12
Sinclair & Co.'s Corn and Cob Crushers,	30	Subsoil Ploughs,	8 to 12
Baldwin's do.	65	Other kinds, embrac'g about 25 sorts, and suited to every variety of soil,	2.50 to 13
Goldsborough's Corn Shelling & Shucking Machine,	35	Corn & Tobacco Cultivat.	5 to 6
Hand do. assorted,	15 to 17	Harrows,	6 to 16
Vegetable Cutters,	20	Grain Cradles & Scythes,	4 to 5
Threshing Machines,	40 to 60	Plough and Machine Castings,	per lb. 4 to 5
Horse Powers,	75 to 100		
Cylindrical Straw Cutt	28 to 45	Fanning Mills,	25 to 30
Do. extra large,	75	Horse Hay Rakes,	11
Common Straw Cutters,	5 to 12	Grindstones, on friction rollers,	13
Betts & Green's do.	25 to 30		
Pierce's and Dolphin self-sharpening Plows, (new &		Lime Spreaders,	30

Ploughs and Machinery REPAIRED on reasonable terms. Also
GARDEN AND FARMING TOOLS—of every sort.
GARDEN AND FARMING SEEDS " "
GARDEN AND FARMING BOOKS " "

☞The agricultural community will find it their interest to examine our stock of Implements, Seeds, &c. We promise purchasers polite attention and lowest market prices. R. S. Jr. & Co.

POUDRETTE

Of the very best quality for sale. Three barrels for $5, or ten barrels for $15—delivered free of cartage by the New York Poudrette Company, 23 Chambers street, New York. Orders by mail; with the cash, will be promptly attended to, and with the same care as though the purchaser was present, if addressed as above to

D. K. MINOR, Agent.

A supply now on hand from the N. York establishment, by the single barrel, or larger quantity. For sale by

SAML. SANDS,
je 19 office of the Farmer, Baltimore st.

FARMERS! EXAMINE FOR YOURSELVES!

The well selected stock of Implements belonging to JAMES HUEY & CO. No 7 BOWLY'S WHARF, Baltimore. Our stock consists of a large lot of PLOUGHS, SHEARS, POINTS, and CULTIVATORS, which we will sell low to suit the times—among which rank the economical WILEY, and the MINOR & HORTON PLOUGH of the N York composition metal and manufacture—the share has a double point and edge, equal to two shares and points. We keep on hand all kinds of PLOUGHS, premium CORN SHELLERS, HAY & STRAW CUTTERS, Corn & Cob CRUSHERS, Horse RAKES, Corn and Tobacco HOES. ☞Farmers and Planters on the Eastern and Western Shores may send their orders with confidence, as they will be attended to with pro aptitude. We also keep GARDEN & FIELD SEEDS. Thankful for past favors, we hope to merit a continuance of the same. Agents for the above implements,

S. L. STEER, Market st. near the corner of Paca, Baltimore
E & W. BISHOP, Bel-air market, Baltimore. fe 28

PORTABLE TUBULAR STEAM GENERATOR.

The undersigned *successors to the late firm of Bentley, Randall & Co.* are manufacturing, and have constantly on hand a full assortment of the above Boilers, which within the last few months have undergone many improvements: we can now with confidence recommend them for simplicity, strength, durability, economy in fuel, time, labor and room, to surpass any other Steam Generator now in use. They are equally well adapted to the Agriculturist for cooking food for cattle and hogs, the Dyer, Hatter and Tanner for heating liquors, to Manufacturers (both Cotton and Woollen) for heating their mills, boiling sizing, heating cylinders, &c., to Pork Butchers for heating water for scalding hogs and for *rendering lard*, to Tallow Chandlers for melting tallow by circulation of hot water (in a jacket,) to Public Houses and Institutions for cooking, washing and *soap making*, and for many other purposes for all of which they are now in *successful* operation; the economy in fuel is almost incredible; we guarantee under all circumstances a saving of *two thirds*, and in many instances *fully three fourths*—numerous certificates from the very best of authority can be produced to substantiate the fact. We had the pleasure of receiving the premium for the best Steam Apparatus at the Agricultural Fair held at Govanstown in October 1843.

Manufactory, McCausland's old Brewery, Holliday st. near Pleasant st., Baltimore, Md.

Dec. 6. tf RANDALL & CO.

GRAIN CRADLES! GRAIN CRADLES!

We mean what we say when we assert that A. G. MOTT, corner of Ensor and Forest sts. Old Town, near the Bel-air market, is now making up, and has for sale, the very best and cheapest article of the kind in the Baltimore market, and no mistake. Try them. je 19

MEDITERRANEAN WHEAT.

600 Bushels of this Wheat for Seed, raised by a gentleman in Baltimore County, will be sold low, if immediately applied for.—The quantity is not to be surpassed by any wheat raised in the State of Maryland. A sample can be seen at the office of the "American Farmer." For Sale by SAMUEL SANDS.

HORSE POWERS AND CORN CRUSHERS.

The subscriber has for sale the above Implements which he can recommend to all purchasers as being SUPERIOR ARTICLES. They are made with a view to strength, durability and efficiency, possess great power, are constructed upon the very simplest principles of mathematical exactitude, and are calculated to do as much work as the largest farmer can desire, and being free from complication, are not easily put out of order, and easy of repair. For proof of their intrinsic value, the subscriber refers to the following certificate from one of our most intelligent practical farmers, who combines with a knowledge of farming that of machinery, and is every way competent to pass a correct judgment.

GEORGE PAGE, Machinist,
West Baltimore st. Baltimore.

Orders and letters of inquiry, POST PAID, will be promptly attended to. feb 14

I hereby certify that I was one of the committee on Agricultural Implements and Machinery at the last fair of the Baltimore Co Agricultural Society—that I attended the first day of examination but not the last: that after a full and fair examination of all the other machines of similar kinds, and an interchange of opinions among the judges, it was determined by a vote of 4 out of the 5 judges, to give Mr. GEORGE PAGE the first premium on his CORN and COB CRUSHER and HORSE POWER, they each being considered very superior, both in power and operation, as well as durability to any others on the ground. It was universally admitted, that the Corn and Cob Crusher could do twice as much work as any other machine of the kind on the ground—and I must confess, that I was both mortified and surprised, to find by the award of my co-judges, that they had changed their opinions after I left, and it had been agreed upon to award the above premiums to Mr. Page by so decided a vote as 4 to 1, that they should afterwards change that determination after I had left without consulting me is alike a matter of surprise and mortification. ABNER LINTHICUM, Jr.

JAMES MURRAY'S
PREMIUM CORN AND COB CRUSHERS.

These already celebrated machines have obtained the premium by a fair trial against the other Crushers exhibited at the Fair held at Govanstown, Balt. co. Md. Oct. 18th, 19th and 20th, 1843, and the increased demand enables the patentee to give further inducements to purchasers by fitting an extra pair of grinders to each machine without extra charge. Prices $25, 30, 35, 40, 45.

ALSO, small MILLS, which received a certificate of merit, for $15.

I have also superior CUTTING BOXES, such as will bear inspection by either farmers or mechanics.

Also, Horse Powers, Mills, Corn Shellers, Mill and Carry-log Screws, small Steam Engines, Turning Lathes, &c. &c.

Also, a second hand Steam Engine, 16 horse power, and the works for two Saw Mills.

Any kind of Machine, Model or Mill-work built to order, and all mills planned and erected by the subscriber, warranted to operate well.

☞Orders can be left with J. F. Callan, Washington, D. C.; S. Sands, Farmer office; or the subscriber,

Mr. Abner Linthcum, jr., and all Machinests are invited to a fair trial of Grinding against my Corn and Cob Crushers, and if I do not do more work, taking the power, quantity, and quality into consideration, I will give them my machine gratice.

Patent Rights for sale by the subsbriber.

no 8 JAS. MURRAY, Millwright, Baltimore.

MANGELWURZEL AND FRENCH SUGAR BEET SEED,

Just received and for sale by

ROBT. SINCLAIR JR. & CO.
Ap 22 Seedsmen, No. 60 Light st.

CLEAZY'S IMPROVED SELF-SHARPENING PLOUGH.

J. S. EASTMAN, Pratt street, a little west of the Baltimore & Ohio rail road Depot, would invite public attention to this superior implement, both as to its simplicity, cheayness and good work with light draft. He will furnish patterns to manufacturess living out of this state on reasonable terms. may 1

NEW PATENT CORN MILL,—CORN AND COB CRUSHER.

The subscribers have recently invented and constructed a Corn Mill and Crusher, to be worked by hand or horse power, which are remarkably simple and admirably adapted to the present wants of farmers. Either of the above machines may be seen in operation at our warehouse, No. 60, Light street.

ROBT. SINCLAIR, JR. & CO.
PRICES—Corn Crusher $30—Corn Mills $40. ap 29

THE BOMMER MANURE METHOD.

We wish to afford every facility to the introduction of this method, as the better it is known the higher it will be esteemed. If farmers who are living in a neigborhood will club together, we will offer them the following inducements to purchase, viz. To any club of Five ordering the method to one address, we will make a deduction of 15 per cent. To a Club of Ten, 20 per cent. reduction, and to larger clubs, a still larger discount upon our established rates for single methods, which are as follows:

For a garden up to 20 acres,	$6
" 100 acres arable land,	10
" 200 " "	15
" 300 " "	18
" 400 " "	20
Unlimited number of acres,	25

☞Purchasers of a smaller right can at any time increase it by paying the difference in price. ABBETT & CO.

Southern proprietors of the Patent Right, at Parsons & Preston's Book Store, adjoining the Rail Road Depot
mh 13 tf in Pratt street, Baltimore.

☞Those who find it more convenient, can leave their orders with S. SANDS, at the office of the *American Farmer*, who will promptly attend thereto. mh 13

MURRAY'S CORN & COB CRUSHERS & GRINDERS.

The subscriber having so simplified the construction of the Machine, and having at the same time added to its efficiency, both for the quantity and quality of its work, is now enabled to sell for $25 Crushers of the capacity of cylinder heretofore sold at 40 dollars—Hand Crushers for 20 dollars—either with or without self-feeders. Any other machines made to order. Also, Repairs of all kinds of agricultural implements. These machines can be seen in operation opposite the Willow Grove Farm of Mr. J. Donnell.

fe 14 WM. MURRAY.

AGRICULTURAL IMPLEMENTS.

J. S. EASTMAN, at No. 36 West Pratt st. about half a square west of the Baltimore and Ohio rail road depot, has on hand a great variety of Plows and Plow Castings, and other Farming Implements at wholesale and retail, as follows, viz. his newly patented Cleasy self-sharpening plows of 7 different sizes, (and one large left hand do) he has many testimonies to show the superior merits of this implement.

Also—Gideon Davis' improved ploughs, of all sizes, wrought and cast shares, do do. Connecticut improved, a superior article for light soil; Evans' reverse point ploughs, with cast shares only; Wyman's No. O. self-sharpeners, various bar-share and coulter ploughs and superior side ploughs, etc. etc. Also, corn and tobacco Cultivators, wheat fans, cylindrical straw cutters of various sizes, a superior article; lime carts, superior Pennsylvania made grain Cradles; small Burrstone Mills for driving by horse power or steam; Corn Shellers, Threshing Machines (and horse-powers for two or four horses) made very durable and to thresh clean. Bachelder's and Osgood's patent corn planters, etc. with a great variety of their implements made of the best materials and in the best manner. All the above are sold at reduced prices to suit the times. may 1